



**U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Land
Management**

**U.S. Department of Commerce, National Oceanic and Atmospheric
Administration, National Marine Fisheries Service**

Record of Decision

**Purchase of the Headwaters Forest and Elk River Property and Issuance of
Permits to Allow Incidental Take of Threatened and Endangered Species to
the Pacific Lumber Company and its wholly-owned subsidiaries, Scotia
Pacific Company, LLC, and Salmon Creek Corporation**

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I. SUMMARY

The Fish and Wildlife Service (FWS) of the U.S. Department of the Interior (DOI), and the National Marine Fisheries Service (NMFS) of the U.S. Department of Commerce (DOC), have prepared this Record of Decision (ROD) in order to meet the requirements of the National Environmental Policy Act of 1969, as amended, (NEPA). This ROD documents the decisions of the Secretary of the Interior to purchase the Headwaters Forest and Elk River Property through the Bureau of Land Management (BLM) and to issue through FWS an Incidental Take Permit (ITP) under section 10 of the Endangered Species Act of 1973, as amended (ESA). This ROD also documents the decision of the Secretary of Commerce to issue through NMFS a separate ITP under section 10 of the ESA.

More specifically, to accomplish the purchases of the Headwaters Forest, the Elk Head Springs Forest and the Elk River Property, the Secretary of the Interior will take the following actions:

- (1) Acquisition by the United States from the Pacific Lumber Company and its wholly-owned subsidiaries, Scotia Pacific Company, LLC, and Salmon Creek Corporation (collectively referred to as "PALCO") of the approximately 4,500-acre Headwaters Forest, which includes approximately 2,700 acres of old-growth redwood trees, and the approximately 1,125-acre Elk Head Springs Forest, which includes approximately 300 acres of old-growth redwood trees (the Headwaters and Elk Head Springs Forests are referred to collectively as the Headwaters Forest).
- (2) Purchase of approximately 9,600 acres owned by the Elk River Timber Company (Elk River Property), approximately 7,700 acres of which will be transferred to PALCO as part of the consideration for the Headwaters Forest, and approximately 1,845 acres of which will be transferred to the United States and preserved as a buffer for the Headwaters Forest. The combined area of the acquired Headwaters and Elk Head Springs Forests, plus the Elk River property to be transferred to the United States, is approximately 7,400 acres. The State of California will contribute funds toward the purchase of the Headwaters Forest and the Elk River Property, will be granted a conservation easement, and will participate in the management of the properties when they are in public ownership. In addition, in response to PALCO's Habitat Conservation Plan and application for an ITP, the Secretaries of the Interior and Commerce, through the FWS and the NMFS (the "Services"), respectively, will issue ITPs under section 10(a) of the ESA covering take of threatened and endangered species on PALCO's lands that meets the requirements of the ESA and other applicable laws and regulations. The land acquisitions and the ITP issuance will be referred to in combination as the "Project."

The proposed land acquisitions and issuance of ITPs are federal actions subject to review under NEPA. Thus FWS, at the direction of the Secretary of the Interior, and NMFS, at the direction of the Secretary of Commerce, prepared draft and final documents in compliance with NEPA. The FWS and NMFS prepared these documents jointly with agencies of the State of California acting in fulfillment of their responsibilities under the California Environmental Quality Act (CEQA). The joint final "Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) and Habitat Conservation Plan (HCP)/ Sustained Yield Plan (SYP) for the Headwaters Forest

Project" describes in detail several proposed actions by the Secretary of the Interior, FWS, the Secretary of Commerce, NMFS, the California Wildlife Conservation Board (WCB), the California Department of Forestry and Fire Protection (CDF), and the California Department of Fish and Game (CDFG), and alternatives to those actions.

The Secretaries of the Interior and Commerce intend to achieve the following objectives with this project: to protect species and their habitats in accordance with the federal and state Endangered Species Acts (ESAs); to allow incidental take of species listed as threatened or endangered under the ESAs; to provide permanent protection for the Headwaters Forest and Elk Head Springs Forest through their transfer into public ownership; to provide for sustained production of timber products, consistent with federal and state laws, on lands owned by PALCO; and to reduce public controversy regarding PALCO's management of its timberlands, particularly the Headwaters Forest.

This ROD will: a) provide background information about the development of the HCP; b) briefly describe the Project, and include a summary of the key provisions of the HCP; c) describe the process for public comments on the draft HCP; d) explain the changes between the draft and final versions of the HCP; e) describe alternatives to the project considered in reaching the decisions; f) identify key issues; g) state the Secretaries' decisions; h) present the rationale for the decisions; and i) state whether all means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted.

II. BACKGROUND

The Headwaters Forest is the largest privately-held stand of old-growth redwood trees in the United States. The trees in the Headwaters Forest may be over 1,000 years old. These trees are majestic, standing from 200 to over 300 feet tall. Ancient coastal redwood forests once stretched from central California to southern Oregon. Today, only approximately 5 percent of old growth redwood forests remain standing. Old growth redwood forests, and the streams that run through them, provide habitat for several endangered and threatened species, including the marbled murrelet (a small sea bird), and several species of salmon, including coho salmon.

The Pacific Lumber Company has been managing forest lands in Humboldt County, California for over 100 years. In 1986, MAXXAM, Inc. (MAXXAM) purchased the Pacific Lumber Company, including its name, facilities, and approximately 200,000 acres of timberland. Subsequently, the Salmon Creek Corporation and Scotia Pacific Company, LLC (formerly Scotia Pacific Holding Company) were formed as wholly-owned subsidiaries of the Pacific Lumber Company. Approximately 6,000 acres of forest lands, including the Headwaters Forest, were transferred to the Salmon Creek Corporation. The Scotia Pacific Company, LLC, owns the majority of the forest lands.

Since its acquisition by MAXXAM, PALCO's logging of its timberlands, particularly old-growth redwoods, has engendered substantial public controversy as well as litigation. During this time,

several unsuccessful attempts have been made to bring the Headwaters Forest into public ownership.

In September of 1996, PALCO's desire to obtain ITPs, a desire on the part of the federal and state governments to provide permanent protection for the Headwaters Forest, and the parties' mutual desire to resolve the ongoing public controversy and litigation led to an agreement among the Pacific Lumber parties, the United States, and the State of California (Agreement of September 28, 1996; Agreement; Appendix A of the FEIS/EIR). In brief, the Agreement provides for, among other things:

Transfer of the Headwaters Forest and other timberlands to public ownership in exchange for other property and assets;

Submission of an HCP by PALCO for expedited processing by FWS and NMFS in order to issue the ITPs;

Approval of a Sustained Yield Plan (SYP) by California for timberlands that remain in PALCO's ownership after the acquisition.

The Agreement, which under its original terms was to expire on February 28, 1998, has been extended by the parties. During the period the Agreement remains in effect, PALCO has agreed not to harvest any acreage within the Headwaters Forest and other areas to be purchased by the United States and California.

Subsequent to the Agreement, Congress enacted legislation authorizing an appropriation of funds to purchase the Headwaters Forest and Elk River Property in lieu of the exchange of land and other property contemplated under the September 1996 Agreement. Title V of the Department of the Interior and Related Agencies Appropriations Act, 1998, Public Law 105-83 (P.L. 105-83; set out in Appendix B to the FEIS/EIR), enacted in October 1997, appropriates up to \$250 million from the Land and Water Conservation Fund as the federal government's share of the acquisition cost of the Headwaters Forest and Elk River Property. Consistent with the earlier Agreement, the legislation provides for acquisition of 1,845 acres of the Elk River Property into public ownership and transfer of the remaining 7,755 acres to PALCO as partial payment for the Headwaters Forest. The funding authorization expires on March 1, 1999.

Under the federal legislation, the following conditions must be met by March 1, 1999, to render the appropriation effective:

FWS and NMFS must issue ITPs to PALCO under Section 10 of the ESA based on a multiple species HCP covering PALCO's timber property;

An appraisal of the lands to be acquired by the United States must be completed, have been reviewed by the Comptroller General of the United States, and have been provided

to specified congressional committees;

The Secretary of the Interior must issue an opinion of value to specified congressional committees for the land and property to be acquired by the federal government;

The State of California must approve an SYP covering PALCO's timber property;

Adequate provision must be made for public access to the Headwaters property;

The State of California must provide a contribution of \$130 million for the transaction;

PALCO must dismiss specified lawsuits pending in federal and state courts against the United States and the State of California; and

An environmental impact statement for the proposed HCP must be prepared and completed in accordance with the applicable provisions of NEPA.

On February 27, 1998, MAXXAM, PALCO, and the federal and state governments reached an Agreement in Principle on the basic outline of a terrestrial and aquatic habitat conservation plan to be expanded by PALCO into a draft HCP. PALCO then prepared a draft HCP based on the Agreement in Principle. The draft HCP was published in the Federal Register on July 14, 1998. At that time, the FWS and NMFS stated that the draft HCP generally met the objectives of the Project, but that some specific concerns remained and it was necessary to comply with statutory requirements including those under NEPA and Section 7 of the ESA, and to carefully consider public comments received as part of the review process.

Subsequently, on August 31, 1998, the California Legislature passed Assembly Bill 1986 (Chapter 615 of the Statutes of 1998; AB 1986; set out in Appendix B of FEIS/EIR), which appropriates \$130 million to the Wildlife Conservation Board as the state's share of the cost of acquiring the Headwaters Forest and Elk River Property in furtherance of the Agreement. AB 1986 conditions the expenditure of state funds on the inclusion of several specific provisions in the final HCP, Implementation Agreement (IA), and ITP.

The state legislation also appropriates up to \$80 million to fund the future purchase of the Owl Creek Marbled Murrelet Conservation Area (MMCA) and up to \$20 million to fund the purchase of the Grizzly Creek complex. While the above appropriations for the Owl Creek MMCA and the Grizzly Creek complex and other identified areas cannot be encumbered unless the final HCP, IA, and ITPs meet the conditions set out in the legislation, purchase of the two properties is not a component of the HCP, or ITPs.

III. PROJECT DESCRIPTION

Purchase of Headwaters and Elk Head Forests and Elk River Property

The Secretary of the Interior will proceed with the acquisition of the Headwaters and Elk Head Springs Forests and the Elk River Property on terms consistent with and as authorized by P.L. 105-83. Appraisals of the properties to be acquired have been completed, the State of California has agreed to provide \$130 million as its contribution to the transaction, and the terms of the transaction have been agreed to by PALCO and the Elk River Timber Company.

The proposed transaction will be carried out as follows: California will provide \$130 million as a grant to the United States. PALCO will receive from the United States a cash payment of \$300 million, will receive from the Elk River Timber Company approximately 7,704 acres of the Elk River Property, and will convey to the United States title to the Headwaters Forest. The Elk River Timber Company will receive from the United States a cash payment of \$78.4 million and deed approximately 1,746 acres of its property to the United States and approximately 7,704 acres to PALCO. In consideration of California's contribution to the transaction, the United States will grant California a conservation easement on the properties to be acquired. Additionally, California will participate in the management of the acquired properties.

As a component of the land transactions, PALCO will grant the United States an easement for public access to the Headwaters property on a road on lands owned by PALCO, and the United States will grant PALCO rights of way to use roads on the federally acquired lands for access to land PALCO will retain and land PALCO will obtain from the Elk River Timber Company.

Issuance of Incidental Take Permits

Statutory Framework

Section 10 of the ESA permits incidental take (including harm, harassment, injury and/or mortality) of listed species provided that a landowner's activities will not "jeopardize" the survival and recovery of the species and the landowner "minimizes and mitigates to the maximum extent practicable" the impact of take it is likely to cause by its activities. In order to obtain such permission, PALCO must submit an HCP that, in the judgement of the Services, meets, among other things, these basic requirements, and in addition, is sufficiently funded by the applicant.

Under the ESA and its implementing regulations, "take" of a listed species may arise from significant habitat modification that results in actual injury or death to the species. PALCO's harvest of old-growth trees and other activities in marbled murrelet habitat and its activities near streams and in unstable areas and areas likely to cause siltation to streams would likely result in "take" of listed species. Therefore, PALCO desires and needs ITPs from the Services.

While issuance of an ITP to PALCO is an integral component of the actions which must be taken to complete the Headwaters acquisition in accordance with P.L. 105-83, PALCO's permit application has been processed in the same manner and in accordance with the same provisions of the ESA and implementing regulations that apply to all ITP applicants. Ideally, the Services would have published the draft HCP and corresponding draft EIS simultaneously, but time constraints in P.L. 105-83 forced the Services to expedite publication of the draft HCP. PALCO submitted its application for an ITP to the FWS, and this application was then transmitted to NMFS. NMFS determined that the forwarded application was sufficient for its purposes and did not require PALCO to submit a separate application for the NMFS ITP Permit. The Services have conducted a consultation and conference under Section 7 of the ESA on the proposed ITP and have issued a Biological and Conference Opinion Regarding Issuance of an Incidental Take Permit to the Pacific Lumber Company, Scotia Pacific Company LLC and Salman Creek Corporation (the "Biological Opinion"), dated February 24, 1999. They have also adopted findings on the proposed permits .

On the basis of the Services' findings and conclusions, which are attached as Appendix B, the Secretaries, through the Services, will issue under Section 10 of the ESA ITPs to PALCO lasting 50 years. The total amount of land covered by the HCP and its corresponding implementation agreement ("IA") is approximately 211,700 acres, currently owned by PALCO or to be acquired by PALCO as part of the Headwaters Project.

Summary of the Final HCP

A 5,625-acre portion of PALCO's property includes the Headwaters and Elk Head Springs forests, which contain the largest grouping of old-growth redwood trees on private land. These and other PALCO old-growth redwood forests are important habitat for the marbled murrelet (*Brachyramphus marmoratus marmoratus*), which, in 1992, was listed as endangered under CESA and as threatened under the federal ESA. These areas also provide important habitat for the northern spotted owl (*Strix occidentalis caurina*), federally listed as threatened in 1990, and for other listed species as well. PALCO lands also include stream habitat for the Southern Oregon Northern California Coast (SONCC) evolutionarily significant unit (ESU) of coho salmon (*Oncorhynchus kisutch*), federally listed as threatened; steelhead (*Oncorhynchus mykiss*), a candidate species for federal listing in the Northern California ESU; chinook salmon (*Oncorhynchus tshawytscha*), federally proposed as threatened in the Southern Oregon and California Coast ESU; and coastal cutthroat trout (*Oncorhynchus clarki clarki*), a candidate species for federal listing, presently under review for listing in Northern California. PALCO lands also encompass proposed critical habitat for coho salmon and chinook salmon. In addition, the HCP will cover the American peregrine falcon, bald eagle, western snowy plover, and the SONCC ESU of coho salmon. The proposed permit would also cover eleven additional species, one of which, chinook salmon, is currently proposed for listing under the federal ESA, another of which, the bank swallow, is listed under the California ESA, and nine other species which are currently not listed under either the federal or California ESA. Unlisted species are addressed in the HCP as though they were listed and would be covered for take if listed during the term of the

ITPs.

PALCO seeks permit coverage with respect to potential take of covered species for timber management and other activities set forth in the HCP, including vegetation management (but not the use of forest chemicals such as herbicides); road and landing construction; road reconstruction, storm-proofing, maintenance and use; burning; operation of two commercial rock quarries; development and operation of borrow pits; water drafting; and scientific surveys and studies. PALCO may seek to add near-stream gravel mining, stream enhancement projects, grazing, recreation, fish rearing, and application of forest chemicals to the permits in the future.

The HCP contains individual conservation plans for several species, including the marbled murrelet, the northern spotted owl, aquatic species, the bald eagle, the western snowy plover, the American peregrine falcon, reptile and amphibian species, the bank swallow, the California red tree vole, and the Pacific fisher. The plans are set out in detail in the HCP and IA and are summarized in the Findings and the Biological/Conference Opinion. Elements of these plans are set forth below.

Avian Species

The marbled murrelet plan will set aside a total of approximately 7,728 acres of land in designated Marbled Murrelet Conservation Areas. These lands will include approximately 1,446 acres of uncut old growth and approximately 2,700 acres of partially harvested residual redwood stands. No timber harvest activities will be permitted in the MMCAs during the term of the permit. The plan contains strategies intended to recruit closed canopy high basal area second growth buffers for residual and old growth stands, to recruit second growth to provide shelter for nest platforms, and to minimize new activity which could disturb murrelet nesting in the MMCAs. The plan provides 300-foot selective harvest buffers adjacent to old growth redwood in the Headwaters Forest and around Humboldt Redwoods and Grizzly Creek Redwoods State Parks, and contains seasonal and phasing requirements to minimize impacts to murrelets. The plan also provides for both compliance and effectiveness monitoring and for the establishment, with \$1.5 million in funding from PALCO, of a research program to study the conservation needs of the murrelet during the first ten years of the permit. Including the Headwaters Forest acquisition, over 90 percent of the uncut old growth redwood and 50 percent of the residual on the property will come under protection. Timber harvest in uncut and residual old-growth will be directed to lower quality habitat in smaller, more fragmented stands.

The northern spotted owl (NSO) conservation plan is designed to insure the continuance of a viable NSO population on PALCO's lands for the life of the permit. The plan provides for the retention and recruitment of requisite habitat types and restricts harvest activities near owl activity sites. The plan requires that 108 owl activity centers within the plan area be retained annually over the permit term and calls for annual censuses to monitor owl activity centers and determine the number of pairs, nesting pairs, and reproductive rates. The NSO plan will allow some reduction of the existing population, which occurs at one of the highest densities reported

for the species. However, the population "floor" of 108 activity centers substantially exceeds the population goal established for the area by the NSO Recovery Team. Nesting habitat will be provided in old-growth, residual, and late seral timber stands, and prey species will be produced in young forest stages following harvest. All reproductively active sites will be protected during the breeding season. A scientific panel will meet regularly to review information and make management recommendations to help maintain population levels.

Both the bald eagle and American peregrine falcon inhabit the property in small numbers. No bald eagle nest sites are known on the property, and only one peregrine nest site is known. However, bald eagle populations are continuing to expand, and it is possible that eagles will nest on the property in the future. The plans for these species will protect all nest sites from disturbance. The provisions of the aquatic conservation plan should also improve forage conditions for bald eagles.

Two other birds covered by the HCP, the western snowy plover and the bank swallow, are not known to inhabit the property at this time. Both depend on specific nesting habitat types that may be present on the ownership. The snowy plover conservation plan is designed to identify and protect any snowy plover nests within the plan area, and the bank swallow plan is intended to avoid impacts to bank swallow nesting colonies on streambanks and hillsides and prevent the establishment of nest colonies in stock-piled sand associated with in-stream mining operations. Surveys will be conducted in favorable habitats in advance of management activities that have potential to disturb nesting sites, and any sites discovered will be protected.

Aquatic Species

The National Marine Fisheries Service, more specifically, has given meaning to the term "jeopardy" in the context of Section 10 of the ESA by defining its opposite. An HCP that avoids jeopardy will achieve over time the essential habitat functions required for the long-term survival of listed species. This objective requires that HCPs contain measures that have a high probability of achieving habitat conditions that will support well-distributed, viable populations of listed species. Consistent with that policy, the stated goal of the aquatic conservation plan, which is applicable to the four covered anadromous salmonids, SONCC coho salmon, SOCC chinook salmon, Northern California steelhead, and SOCC coastal cutthroat trout, is to maintain or achieve, over time, a properly functioning aquatic habitat condition.

In order to survive these species must have habitats which provide for its spawning, rearing, migrating, feeding and sheltering needs. In order to spawn and rear, salmon need streams that have cool, clear, water that has some large woody debris as well as gravel in which to lay eggs and for young fish to hide. The biggest dangers to this habitat from PALCO's activities are the lack of large wood, loss of shade from trees which will increase water temperature, and the inundation of the streams with massive amounts of sediment that smothers habitat and the newly laid salmon eggs or hatchlings and the lack of habitat instream due to lack of large wood and too much sediment. These problems are compounded by the geological makeup of the property.

These are steep lands, with unstable soil, in the most active weather and seismic zone on the West Coast. These soils are stabilized by the presence of tree root systems; however, once these are removed, there is nothing stopping the occurrence of land and mudslides, which are aided in their destructive paths by the seasonal Class III streams. Ultimately, all the sediment ends up in the Class I and II streams, which inevitably affects the salmon spawning grounds. Road construction and road use, especially since roads on the property are generally not paved, can aggravate habitat conditions by further pouring sediment into the streams and interrupting the natural flow of water down channels off hillsides.

The elements that constitute functioning habitat are affected by past and present timber harvest, road management, and other covered activities on PALCO's lands. The aquatic conservation plan is made up of six interrelated strategies that will minimize and mitigate the effects of the covered activities on the habitat elements. These strategies focus on decreasing water temperatures, reducing the amount of sediment that enters streams from surface erosion and mass wasting, and increasing the potential for large woody debris recruitment in order to maintain or achieve, over time, properly functioning aquatic conditions for all life stages of the four covered salmonids. These conditions will provide for the long term survival of anadromous salmonids.

The aquatic conservation strategy's six main elements are: 1) watershed analysis; 2) riparian management; 3) hillslope management; 4) road management; 5) cumulative effects; and 6) monitoring. The following is a summary of the highlights of each aquatic element.

Watershed Analysis

The cornerstone of the HCP is watershed analysis because it will tailor the HCP to this landscape. Watershed analysis is a detailed study of all lands covered by the Plan that will inform the development of watershed specific land management measures based on current information of the condition of the land and habitat in specific watersheds. The watershed-specific land management measures arising from the watershed analysis must be designed to achieve, over time, a properly functioning aquatic habitat condition. PALCO in consultation with the Services, will establish a schedule that results in completion of the initial watershed analysis for all covered lands within five years of the issuance of the incidental take permit. NMFS, FWS, and CDFG will then review each watershed analysis upon its completion and will establish the site-specific prescriptions for implementation. Each watershed analysis will be revisited every five years to determine if environmental conditions warrant a change in prescriptions.

The Services, in consultation with CDFG, will establish a peer review process to evaluate, on a spot check basis, the appropriateness of completed analysis and prescriptions that are developed through the watershed analysis process. This peer review spot check process shall be developed prior to the completion of the first watershed analysis, in approximately nine months. A peer review process is also required if any PALCO, NMFS, FWS, or CDFG member of the watershed analysis team disagrees with the prescriptions recommended by the analysis team.

Riparian Management

Prior to the completion of watershed analysis, buffers or "Riparian Management Zones" (RMZs) are established on each side of Class I waters (where fish live), Class II waters (where aquatic life resides, with the exception of fish) and Class III waters (capable of transporting sediment and wood to Class I and II waters during the rainy season). After watershed analysis is completed, the prescriptions for the different Riparian Management Zones can be modified within a range. There are limitations on what the watershed analysis team can require for these zones: a minimum 30-foot, no timber harvest buffer on either side of Class I and Class II waters and a maximum 170-foot, no timber harvest buffer on either side of the Class I and Class II waters. Prior to watershed analysis, the following prescriptions apply.

Class I Waters (Fish-bearing)

The Plan establishes a 170-foot buffer on each side of the Class I waters. All prescriptions apply to each side of the watercourse. The first 100-feet of the buffer is a no timber harvest zone. Selective timber harvest can occur in the remaining 100-feet to 170-feet of the zone. The plan specifies requirements for pre- and post timber harvest tree sizes, numbers and distributions. On steep slopes, those with a slope of 50% or steeper, additional prescriptions have been established that extend the selective timber harvest zone up slope to a maximum of 400- feet from the watercourse (or to the break in the slope, whichever is smaller). The Plan also provides for the retention of all down wood, both on the forest floor and in the water which facilitates salmon spawning.

Class II Waters (Non Fish-bearing)

The Plan establishes a 130-foot buffer on each side of the Class II waters. The first 30-feet of the buffer is a no timber harvest zone. Selective timber harvest can occur in from 30-feet out to 130-feet of the zone. The plan specifies requirements for pre- and post- timber harvest tree sizes, numbers and distributions. On steep slopes, those with slopes of 50% or steeper, additional prescriptions have been established that extend the selective timber harvest zone up slope to a maximum of 400- feet from the watercourse. On more gentle slopes, those less than 50%, a sediment filtration band is established from 130-feet to 170-feet. Within this band, Timber harvest is not limited, but measures are prescribed to reduce sediment runoff. The Plan also provides for the retention of all down wood throughout all the zones, both on the forest floor and in the water.

Class III Waters (seasonal)

The Plan establishes a 30-foot no timber harvest buffer on each side of the Class III waters. However, on 2175 acres over the first 5 years of the Plan, there will be only a 10 foot no timber harvest buffer with a select harvest from 10-feet out to 30-feet. For slopes 50% or steeper, a sediment filtration band is established from 30-feet out to 100-feet. For slopes less than 50%, a

sediment filtration band is established from 30-feet out to 50-feet. This band requires the retention of all downed wood on the forest floor and no use of heavy equipment, except on roads.

Hillslope Management to Prevent Landslides

For areas defined in the HCP as "mass wasting areas of concern", i.e. steep areas that have a high probability of failing and causing landslides, no timber harvest will be conducted until the establishment of prescriptions through the watershed analysis process. New roads will also not be built in these areas until after the watershed analysis process is completed, with the exception of roads that have been assessed by geologists and approved by NMFS, Fish and Wildlife Service and the State of California.

Road Management

Roads will be evaluated and the most problematic sections will be repaired in the first 20 years of the Plan. The HCP also prescribes a series of limitations on road construction, new road location, upgrading, inspection, and wet weather use of roads. All these measures are designed to minimize or avoid the potential for road-related sediment to impacted streams.

Cumulative Effects

Given the sensitivity of the landscape, it is important to measure the combined effect/impacts of PALCO's activities on the watershed as a whole. The HCP describes these impacts through the use of a "Disturbance Index". The HCP sets a numeric threshold for this Disturbance Index at 20%. If this threshold is exceeded, then specific types of timber management activities, such as clear-cutting and road construction, are limited until the watershed begins to recover. The numeric threshold and harvest limitations may be modified based on the results of watershed analysis.

Monitoring

The HCP includes stringent provisions for monitoring PALCO's compliance with the Plan, including requiring a third party monitor to be present during all timber harvest activities. The HCP also contains explicit provisions for substantial penalties and other remedies in the event of permit violations. The monitoring program also includes effectiveness monitoring (i.e. do the prescriptions get the desired results over time); and trend monitoring (i.e. are the listed species and their habitat responding to the prescriptions). Adaptive management is also a part of the HCP, which provides the opportunity to make changes in real-time based on the results of monitoring.

Implementation of the aquatic conservation plan provisions will result in an improvement in the habitat condition for the SONCC coho salmon, SOCC chinook salmon, northern California steelhead, and SOCC coastal cutthroat trout providing for the long term survival of the four salmonids on PALCO's ownership.

Other Species

The aquatic conservation plan will also provide for habitat needs of the four species of amphibians (southern torrent salamander, and the red-legged, yellow-legged, and tailed frogs) and one aquatic reptile (northwestern pond turtle) that will be covered under the HCP. The aquatic strategy is expected to provide significantly improved habitat for these species over time, by increasing the amount of down wood in streams and reducing temperature and sedimentation. A special module will be designed to evaluate the needs of these species in the watershed analysis process, and the subsequent setting of riparian prescriptions will include consideration of their habitat needs.

Two forest mammals, the Pacific fisher and California red tree vole, will be covered by the HCP. The needs of the fisher will be provided by the MMCAs, the property-wide distribution of late seral forests, the riparian management zones, and special measures such as retention of snags, logs, and large hardwood trees during timber harvest. Habitat for the vole, which depends on Douglas-fir trees, will be provided by the MMCAs, property-wide distribution of late seral forests, and the riparian management zones. Both species will be the subject of ongoing surveys to further evaluate distribution and management needs.

IV. PUBLIC COMMENT

The Services published a Notice of Availability of the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) and Receipt of an Application for the Proposed Issuance of an Incidental Take Permit for Threatened and Endangered Species, in the Federal Register on July 14, 1998 (63 FR 39700). Publication of the notice initiated a comment period that closed on November 16, 1998. In addition, four public hearings were held across the State during the comment period to provide the public an opportunity to express their views. Approximately 416 people presented comments at these hearings. Additionally, approximately 18,000 written comments were received by the lead agencies. About 4,000 of these comments were identical postcards and about 7,000 were identical statements. The Services thoroughly reviewed, summarized and responded to all comments in writing by topic in Appendix T to the FEIS/EIR. A complete list of commentors is also included in the FEIS/EIR. Many of the comments resulted in changes to the proposed HCP, IA, and/or DEIS, which are identified in the FEIS/EIR and are summarized below.

The Services published a notice of availability of the FEIS/EIR in the Federal Register on January 22, 1999 (64 FR 3483) which advised that a permit decision would occur no sooner than 30 days from the date of publication. The Services received comments from fifty-two individuals and organizations. These comments have not raised significant new issues. A comment summary and responses by topic are attached as Appendix A.

V. CHANGES BETWEEN THE DRAFT AND FINAL HCP

In response to comments and information received during the public comment period and the provisions of AB1986, the Services made changes to the July 1998 draft HCP, which are reflected in the final HCP. The major changes and the reason for the change are described below.

Marbled Murrelet Conservation Plan

The marbled murrelet conservation plan has been modified to enlarge both the Owl Creek MMCA and the Grizzly Creek complex. An additional 42 acres of uncut old growth, 97 acres of residual old growth, and 136 acres of young forest have been included in the Owl Creek MMCA (increasing the protected old growth in that MMCA by 25 percent); and an additional 13 acres of uncut old growth, 219 acres of residual, and 120 acres of young forest have been included in the Grizzly Creek complex (increasing the protected old growth in that area by 36 percent). Consistent with AB 1986, the Owl Creek MMCA has been set aside for the life of the permit. The Grizzly Creek complex must be protected from timber harvest for a period of five years at which time the complex will be protected as an MMCA for the life of the permit if necessary to avoid jeopardy to the marbled murrelet.

Measures to minimize potential direct take during authorized harvest of murrelet habitat have also been strengthened. Under the final HCP, activities associated with cutting trees (marking, road building, layout construction, and falling) may not be conducted during the breeding season in stands known to be occupied, or in the better quality stands that have not been adequately surveyed. Also, HCP requirements to minimize disturbance within and adjacent to MMCAs and other occupied habitats were strengthened.

Northern Spotted Owl Conservation Plan

The northern spotted owl strategy was clarified in response to public comment. A specific minimum population level (108 activity centers) was established in place of a complex statistical process for determining the minimum population level after five years, and an assured level of pair occupancy (80 percent) was established, as well an objective for reproductive performance. In addition, a habitat retention standard was established for a minimum of 80 of the activity sites.

Aquatic Conservation Plan

Watershed Analysis

Watershed analysis is now required for all covered lands. The prescriptions resulting from watershed analysis are to be established by NMFS, FWS, and CDFG. The minimum no-harvest buffer for Class II RMZs was increased to 30 feet. The maximum no-harvest buffer for Class II RMZs has been increased to 170 feet (horizontal distance). A peer review process has been established to review watershed analyses on a "spot check" basis and when any PALCO or wildlife

agency watershed analysis team member disagrees with any prescription recommended by the team.

Road and Landing Stormproofing

Roads and landing stormproofing has been accelerated to be completed within the first 20 years of the plan. The decadal and annual requirements were increased to a minimum of 750 miles per decade and 75 miles per year. Stormproofing activities are now required to cease during periods of wet weather. Stormproofing activities will avoid riparian management zones (RMZ), water crossings, and mass wasting areas of concern from approximately October 15 until May 1.

Road and Landing Construction, Reconstruction, and Upgrading

New and reconstructed roads and landings will be located outside of RMZs. New and reconstructed roads and landings will avoid mass wasting areas of concern, unless approved by the Wildlife Agencies. Construction, reconstruction, and upgrading are required to cease during periods of wet weather. These activities will also avoid RMZs, water crossings, and mass wasting areas of concern from October 15 until June 1.

Road Inspections

Roads and landings will be inspected in January or February. Roads and landings that cannot be inspected during any one of the dry season annual inspections will be closed or decommissioned.

Wet Weather Use of Roads

All road use is allowed when roads are dry. Use of non-paved roads will cease during periods of wet weather, at any time of year, with exceptions. Generally, light vehicles can use the rocked and non-rocked roads during wet weather if the damage is repaired within 24 hours.

Hillslope Management

Timber harvest is prohibited on mass wasting areas of concern, until watershed analysis prescriptions have been established.

Class I RMZ

The no-harvest buffer has been increased to 100 feet. The outer band of the RMZ is extended to 400 feet or to the break in slope for slopes that are 50 percent or greater.

Class II RMZ

The no-harvest buffer has been increased to 30 feet. The outer band of the RMZ is extended to 400 feet or to the break in slope for slopes that are 50 percent or greater.

Class III RMZ

Prior to the establishment of post watershed analysis prescriptions, a 30-foot no harvest buffer is included as part of the RMZ, with the following exception: on 2,175 acres, the 30-foot forested buffer includes a 10-foot inner no harvest band next to the channel and an outer band of 20 feet for selective harvest. A scientific study will be undertaken to assess the effectiveness of a range of prescriptions.

Disturbance Index

The Disturbance Index (DI) will be redesigned to include roads and landslides. If the DI threshold has been exceeded at the hydrologic unit scale, on PALCO's ownership, then the activities with the highest disturbance ratings will cease until the DI drops below the threshold.

Bald Eagle Conservation Plan

The HCP measures regarding surveys and avoidance of disturbance of nest sites have been strengthened.

Western Snowy Plover Conservation Plan

Language in the HCP has been clarified regarding circumstances requiring increased survey intensity in certain potential breeding areas.

Pacific Fisher Conservation Plan

Retention standards in the HCP for large hardwoods and large logs have been strengthened, as have monitoring requirements. The species will also benefit from improved riparian management measures.

California Red Tree Vole Conservation Plan

Monitoring requirements in the HCP have been strengthened, and in the event of uncertainty regarding performance of the species in young forests, FWS may end permit coverage if studies indicate the proposed conservation measures do not appear to be effective.

Amphibian and Reptile Conservation Plan

Changes in the aquatic conservation strategy have strengthened the protections for the southern torrent salamander, red-legged frog, yellow-legged frog, tailed frog, and northwestern pond turtle species, as well as for salmonids. In addition, following public comment on the DEIS/EIR and HCP, the intent language was strengthened to require incorporation of the findings of the reptile and amphibian watershed analysis module in prescription setting.

Covered Activities

Forest Chemicals

In the July 1998 Draft HCP, PALCO proposed incidental take coverage for forest chemicals including fertilizer and several herbicides, without providing a detailed analysis of effects. The draft EIS/EIR provided a basic analysis of several herbicide compounds commonly used by the company. During the public comment period, PALCO submitted a detailed risk assessment supporting use of these compounds; detailed comments in opposition to herbicide use were also received. Given the

short time period available for highly technical analysis, the Services determined that incidental take permit coverage would not be provided at this time, and informed the company that if such coverage was desired, it would have to be accomplished by a subsequent permit amendment. This decision does not preclude the company from using herbicides, but authorization is not provided for take of listed species that might occur as a result of herbicide use.

Commercial Rock Quarries

Coverage for the two commercial rock quarries was reduced to a period of two years, ending on March 1, 2001. Effects of the quarries on the aquatic environment will be assessed during watershed analysis. The Services will work with PALCO to amend the HCP to continue coverage after the expiration of the initial two year period.

Borrow Pits

Coverage for the development and operation of borrow pits was reduced to a period of five years, ending March 1, 2004. Effects of the borrow pits on the aquatic environment will be assessed during watershed analysis. The Services will work with PALCO to amend the HCP to continue coverage after the expiration of the initial five year period.

Gravel Mining

Instream gravel mining was deleted from the covered activity list because the incidental take of SONCC coho salmon is currently authorized through a section 7 consultation with the U.S. Army Corps of Engineers for gravel mining operations.

Stream Enhancement Projects

Stream enhancement projects were dropped from the covered activity list because the incidental take of SONCC coho salmon is currently authorized through a section 7 consultation with the U.S. Army Corps of Engineers on the CDFG enhancement program.

Recreation, Grazing, Fish Hatchery

Recreation, such as scout camps and archery clubs, grazing, and the fish hatchery were dropped from the covered activity list due to a lack of information regarding impacts and mitigation.

Covered Species

Following the public comment period, PALCO elected to drop 16 unlisted species originally proposed for incidental take permit coverage.

VI. THE ALTERNATIVES

Alternative 1 (No Action/No Project)

Under this alternative, PALCO would not implement an HCP or SYP, would not receive incidental take permits from the Services for its activities, and the Headwaters Forest would not be acquired and brought into public ownership. This alternative assumes that PALCO would continue to operate

in the forest products industry but that its operations would be carried out in a manner which would not result in take of listed species. Under Alternative 1, PALCO would conduct timber harvest on its lands on a THP-by-THP basis under state Forest Practice Rules (FPR). The THPs would be reviewed by CDF and analyzed to determine the potential for take of listed species and measures that would be applied to avoid take. PALCO could operate under existing state FPR to avoid take of marbled murrelets and northern spotted owls, but additional protective measures beyond those required under the FPR would need to be applied to avoid take of coho salmon. While a variety of management measures could be applied to achieve this result, Alternative 1 has been modeled in the FEIS with wide no-harvest riparian buffers applied to each side of streams (170-340 feet along Class I waters; 85-170 feet on Class II waters; 50-100 feet along Class III waters). The use of wide buffers is only one of many approaches that could be employed to describe a No Action/No Project alternative that would avoid take of listed species. Avoiding take of aquatic species could also be accomplished by other strategies in combination with smaller buffers but the use of wide buffers is a practical way to project how habitat features may change across a landscape over time, and allows an impact analysis which can be more readily compared with other alternatives, in accordance with NEPA.

Alternative 1 was not selected as the preferred alternative because it would not accomplish the purposes and needs of the parties to the proposed actions. This alternative would not resolve ongoing controversy regarding the Headwaters Forest or bring that property into public ownership to assure its permanent preservation. In addition, this alternative would allow marbled murrelet habitat to become fragmented into smaller, isolated patches rather than the large contiguous patches which result from Alternative 2, which are of greater benefit to the murrelet. Alternative 1 does not include road management provisions or storm proofing requirements and would not address sedimentation from roads and landings and road activities, and therefore would afford a lower level of protection for aquatic species than Alternative 2.

Alternative 2 (Proposed Action/ Proposed Project)

This alternative would implement the HCP and provide for the issuance by the Services of incidental take permits to PALCO for covered species. The Headwaters Forest would be acquired and permanently preserved in public ownership as described above.

The HCP includes conservation strategies for each covered terrestrial species and for aquatic species to minimize and mitigate the effects of the proposed take. In order to provide protection to marbled murrelets and other species and to conserve old-growth redwood, the HCP would establish a series of reserves, known as MMCAs, consisting of large, contiguous areas of second growth and residual old growth surrounding the major stands of uncut old-growth redwood on PALCO land. These reserves would remain in PALCO ownership but would be unavailable for harvest for the life of the permit. Harvest would be deferred for five years from an additional area, the Grizzly Creek complex, to allow the opportunity for its purchase and permanent protection. If such purchase and protection does not occur, PALCO would be allowed to harvest and engage in other covered activities within the Grizzly Creek complex unless FWS determines, before the end of the five year period, that "take" resulting from covered activities within the Grizzly Creek complex would result

in jeopardy to the marbled murrelet.

Outside the MMCA's, the HCP would include a 300-foot selective harvest buffers on PALCO property adjacent to old-growth redwood in the acquired Headwaters area as well the Humboldt Redwoods and Grizzly Creek Redwoods State Parks. Additional wildlife protection measures include a conservation plan for the northern spotted owl to prevent owl populations from falling below baseline levels, management practices to protect amphibians and reptiles, and minimum requirements for the number of snags and downed logs per acre.

In order to conserve aquatic species, the HCP would establish an aquatic conservation plan which includes six primary interrelated components: riparian management, road management, hillslope management, cumulative effects, monitoring and watershed analysis. The aquatic conservation plan is designed to maintain or achieve, over time, properly functioning riparian habitat conditions. Prior to watershed analysis, the riparian management strategy establishes riparian management zones (RMZ) around Class I (fish-bearing), Class II (aquatic life but non-fish bearing) and Class III (seasonal) waters. Class I RMZs would include a no-harvest band from 0-100 feet and an outer band available for select harvest from 100-170 feet. Class II RMZs would provide an inner no-harvest band from 0-30 feet and a select harvest outer band from 30-130 feet. Equipment use is restricted to existing roads. Class III RMZs would also have an inner no-cut area from 0-30 feet, but the outer band would not include harvest restrictions. Instead, sediment filtration band requirements apply from 30-50 feet or from 30-100 feet, depending on slope steepness. Equipment would be restricted to roads and down wood would be left on site to filter sediment. On 2,175 acres of the Class III RMZ, the inner forested area would include both a no-cut area and an area for selective harvest.

The road strategy would establish provisions for wet weather road use, standards for road construction, reconstruction and upgrading, a progressive road storm-proofing program, a road inspection schedule, and a maintenance program. The HCP hillslope management would include harvest restrictions and would limit new road construction on unstable areas, areas prone to landslides and on steep slopes. A disturbance index would address cumulative effects from timber operations on PALCO's ownership with operation limitations if the index were exceeded. PALCO would also complete watershed analyses to develop watershed-specific restrictions within the first five years following issuance of the ITP. An adaptive management process is included, which could result in modified prescriptions before or after watershed analysis. The process was modified following the completion of the FEIS to incorporate peer review and to make clear that any modification cannot impair the Plan's ability to achieve aquatic goals. The HCP would also establish compliance, effectiveness and trend monitoring to assess the success of PALCO's implementation of the HCP and to determine if the provisions in the aquatic strategy were effective and whether the aquatic habitat was responding as expected.

Alternative 2 incorporates the elements set forth in AB 1986.

Subalternative 2a (No Elk River Timber Company Property)

This subalternative was developed to respond to the possibility that no agreement would be reached

for the purchase of the Elk River Property. Under this alternative, a smaller reserve would be established than in Alternative 2 because 1,764 acres from the Elk River Timber Company would not be included. The reserve would be approximately 5,739 acres and would be in public ownership. It would consist of 4,585 acres of the Headwaters Forest and 1,125 acres of Elk Head Springs Forest currently owned by PALCO and would be managed as described in Alternative 2. The federal and state governments would pay for the property purchased from PALCO by cash only. All other components of this subalternative would be the same as Alternative 2. Because agreement has been reached to purchase the Elk River Property, this subalternative has been dropped from consideration.

Alternative 2 has been selected because it best meet the goals of the proposed actions. It would implement a conservation strategy that will protect covered species and their habitats in accordance with the requirements of the ESA and through the issuance of incidental take permits allow PALCO to conduct compatible timber management and associated activities. This alternative would establish eleven MMCAs for the term of the ITP and would result in improved murrelet habitat quality and better contiguity than Alternative 1. The aquatic measures contained in Alternative 2 would maintain or achieve, over time, properly functioning aquatic habitat conditions as a result of riparian management zones, road prescriptions, hillslope management and the other components of the aquatic conservation plan.

Alternative 2 would result in the creation of the Headwaters Reserve and permanent protection of the approximately 3,117 acres of old-growth redwoods within the reserve. Acquisition of the Headwaters Forest would preserve forever the old growth redwood trees, provide public access to the Headwaters Forest, preserve old growth habitat valuable to the marbled murrelet and other species, and resolve public controversy and potential conflict associated with future activities in the Headwaters Forest.

Alternative 3 (Selective harvest only)

Under this Alternative the Headwaters Forest would be acquired as in Alternative 2, and incidental take permits would be issued to PALCO based on an HCP that would provide for selective timber harvest and eliminate clearcut silviculture prescriptions. Approximately 9,134 acres of stands with residual old-growth redwoods outside of the reserve would not be harvested in order to minimize take of marbled murrelets and other listed species. In addition, each individual stand would have a 600-foot no-harvest buffer around it to minimize edge effects in the residual stands and to enhance the development of old-growth habitat over time. No salvage logging would occur.

On the remaining property, stream buffers would be established based on a site potential tree height of 170 feet. Class I buffers would extend out to 340 feet, Class II buffers to 170 feet, and Class III buffers to 100 feet. Initially, these would be no-harvest buffers but could be modified to allow harvest pursuant to watershed analysis that would be based on watershed-level and site-specific hillslope, riparian and stream conditions. In the FEIS/EIR, Alternative 3 was modeled with the following buffers: Class I - 100 feet; Class II - 75 feet; and Class III - 25 feet. These widths were selected because, combined with the adjacent selective harvest, they would provide high levels of aquatic zone protection while still allowing timber harvest. Late seral conditions would be

maintained within the harvestable portion of the stream buffers and harvest would be allowed once every 20 years.

This alternative would reduce sediment delivery to streams on PALCO property by incorporating a zero net sediment discharge requirement on the five watersheds identified by CDF as cumulatively impacted for sediment. It would also incorporate specific procedures for limiting road sediment and would use a sediment source investigation of the lower Eel River to begin minimizing existing sediment delivery to streams.

Alternative 3 was the environmentally preferred alternative but was rejected because the protections it would provide are not needed to meet legal requirements and it would produce dramatically reduced harvest volumes resulting in substantial negative economic impacts for PALCO and local communities.

Alternative 4 (63,000-acre reserve)

Under this Alternative 63,673 acres of PALCO property would be acquired as a no-harvest reserve. It would encompass six groves of redwoods and the eleven MMCAs. Approximately 58,996 acres of the reserve would consist of PALCO lands, including approximately 5,711 acres in the Headwaters and Elk Head Springs Forests. Approximately 4,677 acres of Elk River Timber property would also become part of the reserve.

Incidental take permits would be issued to PALCO based on an HCP that would apply the conservation and management strategies described in Alternative 2 on the remainder of PALCO's property. The United States and the State of California would acquire the 63,673-acre reserve area from PALCO and the Elk River Timber Company by cash payment. The availability of federal, state or private assets for the purchase of the reserve is unknown.

Alternative 4 was rejected due to uncertainty regarding how funding would be acquired to purchase approximately 56,000 acres in addition to the 7,400 acres being purchased as part of Alternative 2 for the Headwaters Forest acquisition. Alternative 4 would also produce dramatically reduced harvest volumes resulting in substantial negative economic impacts for PALCO and local communities.

In selecting Alternative 2, the Services have adopted all means provided therein to avoid or minimize environmental harm by means of acquiring property for transfer to public ownership in perpetuity and through approving implementation of an HCP with significant natural resource conservation provisions. In adopting Alternative 2, the Services also adopt the monitoring programs contained as described in the HCP. These programs have been fully described in the HCP and analyzed in FEIS/EIR and to avoid redundancy, those descriptions are incorporated by reference. All practicable means to avoid or minimize environmental harm have been adopted by the Services' adoption and implementation of the preferred alternative with the HCP mitigation program and monitoring and compliance measures. A complete description of the HCP and the IA, including a summary of HCP measures designed to minimize and mitigate the effects of incidental take and activities to be covered under the permit is given in the EIS/EIR, Biological/Conference Opinion, and Findings for the

Services' actions on the PALCO application.

VII. KEY ISSUES

In making the decisions set forth in this ROD the Secretaries considered several issues related to the effects of issuing the ITPs and to elements of the Headwaters acquisition. These major issues are: (1) transactional requirements for the purchase of the Headwaters, Elk Springs and Elk River Properties; (2) questions regarding a debt-for-nature swap; (3) effects on old-growth and residual redwood and Douglas-fir forest, and old-growth and Douglas-fir trees; (4) impacts on threatened, endangered and other sensitive species, including marbled murrelet, northern spotted owl, salmonids, and amphibians; (5) effects on water quality and quantity; (6) risk of flooding and landslides; (7) impacts on timber supply, employment and government revenue; (8) PALCO's qualifications to receive ITPs in light of previous state FPR violations; and (8) whether it is in the public interest to proceed with the transaction.

These issues are discussed below under Rationale for the Decision.

VIII. DECISION

NEPA requires federal agency disclosure of the environmental effects of major federal actions significantly affecting the quality of the human environment. At the time of a decision, a federal agency is required to prepare a record of decision stating what the decision was, identifying the alternatives considered in reaching its decision, specifying the alternative which was considered to be environmentally preferable, discussing all relevant factors the agency used in making its decision, and stating whether all practicable means to avoid or minimize environmental harm from the selected alternative have been adopted, and if not, why not.

The Secretary of the Interior and the Secretary of Commerce hereby decide to adopt Alternative 2, the Proposed Action/Proposed Project Alternative, modified, as described in the FEIS/EIR. Under this alternative, the Secretary of the Interior, through the Bureau of Land Management, based on the rationale stated below and conditioned upon the other decisions set forth in this ROD, will acquire the Headwaters Forest and a portion of the Elk River Property into public ownership as follows: The United States, upon receipt of \$130 million from the State of California, will provide cash payments of \$300 million to PALCO and \$78.4 million to Elk River Timber Company. PALCO will provide deeds to the Headwaters and Elk Head Springs Properties and a public access easement to Headwaters property to the United States; and Elk River Timber Company will deed approximately 1,746 acres of its property to the United States and approximately 7,704 acres to PALCO. Further, the Secretary of the Interior, through FWS, and the Secretary of Commerce, through NMFS, will approve the PALCO HCP, execute the IA, and issue ESA Section 10 ITPs to PALCO.

IX. RATIONALE FOR DECISION

Purchase of the Headwaters, Elk Head Springs and Elk River Properties

The cornerstone of the September 1996 Agreement was acquisition of the Headwaters Forest and Elk River properties. As discussed earlier in this ROD, in P.L. 105-83, Congress established several conditions that must be satisfied before the Federal funds to purchase Headwaters are authorized for appropriation. Several of these conditions pertain to the preparation and approval of the required HCP and are discussed elsewhere in this ROD. Those pertaining directly to the purchase itself are discussed below.

Appraisal of Properties to be Acquired; Review by Comptroller General Opinion of Value

P.L. 105-83 requires as a condition of the federal funding authorization that an appraisal of all lands and interests in land to be acquired by the United States be undertaken, be reviewed by the Comptroller General, and be provided to the Committee on Resources of the House of Representatives, the Committee on Energy and Natural Resources of the Senate and the Committees on Appropriations of the House and Senate. The legislation also requires that the Secretary of the Interior issue an opinion of value to the aforementioned committees of Congress for the land and property to be acquired by the Federal government.

BLM required the completion of appraisals of the properties to be acquired in accordance with Federal standards which are found in the Department of Justice's Uniform Appraisal Standards for Federal Land Acquisitions (GPO 1992) and the Appraisal Foundation's Uniform Standards of Professional Appraisal Practice (USPAP, 1997 ed.). BLM contracted with two independent professional, certified private appraisers, one to prepare an appraisal of the Headwaters and Elk Head Springs Forests (Headwaters appraisal) and one to prepare an appraisal of the Elk River Property. The appraisals prepared by the contract appraisers were peer reviewed by two highly qualified private timber valuation experts to provide additional quality control, as well as by the chief State Appraiser, State Forester, and State Director, California BLM.

BLM instructions for the Headwaters appraisal directed that a multi-premise appraisal be performed, based on four premises of harvestability ranging from 25 to 95 percent. The multi-premise approach was deemed appropriate in light of local, state and federal restrictions relating to land use and environmental impacts, including California Forest Practice Rules and California and Federal ESA requirements, and of the difficulty of accurately estimating the timber harvestability on the property in the absence of requisite permits. The range of values for the four harvest levels was: 25 percent - \$135 million; 50 percent - \$250 million; 75 percent - \$350; and 95 percent - \$405 million. The BLM Chief State Appraiser and State Forester concluded that the estimate of market value of each harvest level was reasonable and adequately supported by the information in the appraisal and approved the appraisal.

The Elk River Property appraisal estimated the value of the entire property (9,468 acres) to be \$78.4

million, the value of the acreage to remain in public ownership (1,764 acres) to be \$26 million, and the value of the acreage to be transferred to PALCO (7,704) to be \$51.8 million. Because the Elk River Property contains only second-growth timber with no old-growth redwood stands, it was evaluated under a one-harvest assumption. The BLM Chief State Appraiser and the State Forester concluded that the estimate of market value for the Elk River Property is reasonable and is adequately supported by the information in the appraisal and approved the appraisal.

In a memorandum transmitting the two appraisals to the Secretary of the Interior, the BLM California State Director stated that the appraisals "are in full conformance with the high Federal appraisal standards required by law." The Secretary of the Interior transmitted the two appraisals to Congress in a letter to Congress dated November 24, 1998. The letter also constituted his official opinion of value of the properties to be acquired. In this letter, the Secretary found that the federal and state expenditures authorized and funds appropriated for the acquisition of the Headwaters Forest and Elk River Property to be well within the range identified in the appraisals for the properties. The Secretary also found that the acquisition "represents a unique opportunity for the permanent set-aside of the irreplaceable resources of the American people," and he certified that the acquisitions and property transfers described in the letter are in the best interests of the United States.

The Comptroller General on December 24, 1998 issued a report on the appraisal (Report B-281704), which states, "In our review of the Headwaters and Elk River property appraisals, we did not identify areas in which the appraisals deviated from federal appraisal standards. We also did not find that the use of assumptions in the appraisal was unreasonable given the imprecision involved in appraising timber properties and the unique circumstances of this property."

Public Access to Acquired Property; Rights of Way

PL 105-83 conditions the appropriation of Federal funding for the Headwaters acquisition on adequate public access. BLM considered the most appropriate public access during the development of the appraisal and in a subsequent analysis of access needs. BLM determined that access from the south directly into the Headwaters Forest was necessary. An existing road across PALCO properties, called the Newburg Road, was determined to provide adequate and appropriate public access to the Headwaters Forest. BLM has secured agreement from PALCO to grant an easement allowing public use of the Newburg Road which will provide adequate public access to the Headwaters Forest.

Specific conditions of public use beyond those specified in the easement will be developed by BLM and other agencies under a cooperative management plan required by the Federal legislation. Additionally, PALCO will provide administrative access to BLM on existing roads to allow BLM to manage the Headwaters Forest.

A portion of the Elk River Property which will be transferred to PALCO is surrounded by lands to be acquired by the United States. Additionally, a portion of lands currently owned by PALCO are reached only by a road passing through a portion of the lands the United States will acquire. In order

to provide PALCO access to its lands, the United States will grant rights of way to the Company allowing the use of roads on the property the United States will acquire. These rights of way were reviewed by NMFS and FWS under Section 7 of the ESA (NMFS' Biological and Conference Opinion dated February 24, 1999; FWS Memorandum of Concurrence dated February 24, 1999).

State of California Contribution of \$130 Million

Public Law 105-83 requires that the State of California provide \$130 million for the transaction. On August 31, 1998, the California Legislature passed, and on September 19, 1998, the Governor signed AB 1986. This legislation appropriates \$245 million, of which \$130 million is allocated for expenditure by the California Wildlife Conservation Board (WCB) for acquisition of the Headwaters, Elk Head Springs, and Elk River properties. The funds appropriated by the State are conditioned upon encumbrance by the United States of \$250 million as matching funds in fulfillment of the September 1996 Headwaters Agreement.

The State of California has agreed to provide the United States a grant of \$130 million to complete the purchase of the Headwaters Forest as envisioned in the federal and state Legislation. The grant would be provided in return for a conservation easement which will insure that the lands will be managed consistent with the Federal legislation. Copies of the Grant Agreement with the State and of the conservation easement, which are subject to approval by the WCB, are attached as Exhibits A and B respectively.)

Upon finalization of the decisions set out in the ROD, a determination by the WCB that the conditions of AB 1986 have been met, and a decision by the WCB to expend the funds, the \$130 million appropriated by the California Legislature will be made available to the United States for the transaction and the condition in P.L. 105-83 regarding the State's funding will have been met.

P.L. 105-83 also requires as a condition of the federal funding authorization that the State of California approve an SYP covering the Pacific Lumber Company timber property. PALCO's SYP is under consideration by CDF, which is expected to issue a decision no later than February 26, 1999.

Acquisition of the Headwaters Forest Through a Debt for Nature Swap

It has been suggested that instead of purchasing the Headwaters Forest in accordance with the authorization contained P.L. 105-18 as proposed in this ROD, the property should be acquired by the United States as settlement of asserted liability of MAXXAM Inc. and Charles Hurwitz in connection with a failed savings and loan institution. Claims against MAXXAM and Mr. Hurwitz are within the purview of the Office of Thrift Supervision (OTS) and the Federal Deposit Insurance Corporation (FDIC). Congress has authorized the purchase of the Headwaters Forest and the expenditure of the funding necessary to effect the purchase. The funding authorization expires March 1, 1999. It would be both imprudent and infeasible to rely on a settlement of the OTS and FDIC claims to acquire the Headwaters Forest in lieu of the proposed purchase.

Old-Growth Forests

Since one of the objectives of the Project is to preserve old growth forests, the primary concern regarding effects of the proposed HCP on old growth forests relates to the amount of such forest that would remain available for harvest. Approximately 26,147 acres of old-growth redwood and Douglas-fir exist on the property today (i.e., approximately 12 percent of the property). About 64 percent of this old growth acreage is in so-called residual stands, where the majority of the old trees have already been harvested, leaving scattered old trees in stands with little resemblance to intact uncut stands. Thus, less than 5 percent of the property remains in uncut old growth stands, with over one third of that in the Headwaters- Elkhead Springs area. In sum, as a result of past timber harvest, very little of the ownership has true old-growth characteristics.

The acquisition of the Headwaters Forest and implementation of the HCP would bring about 51 percent of the 9,299 acres of existing uncut old growth redwood and Douglas-fir into public ownership or MMCAs. These would include the six largest stands on the property. Another 12 percent of the uncut old growth would receive a substantial degree of protection in riparian areas, leaving about 37 percent of the uncut old-growth acreage available for harvest, unless it occurs in areas to be protected due to mass wasting concerns. Most of this acreage is in small, fragmented stands, with no stands over 90 acres in size, and correspondingly, reduced value for organisms that depend on extensive old-growth.

The acquisition of the Headwaters Forest and implementation of the HCP also would bring about 25 percent of the 16,880 acres of residual old growth into public ownership or MMCAs. This habitat would be aggregated with old growth stands to protect the maximum available stand sizes. Another 21 percent of the residual would be included in riparian management zones. Thus about 54 percent of the residual acreage would be available for harvest, unless constrained by mass wasting concerns.

Overall, 35 percent of the property's old growth acreage (including both uncut old-growth and residual old-growth) would be protected in acquisitions or reserves, and an additional 18 percent would be within riparian management zones. Of the 12,347 acres available for harvest, 74 percent is residual. The acquisition of the Headwaters Reserve and establishment of the MMCAs would protect the largest, most ecologically valuable aggregations of old-growth, and the HCP measures for the remainder of the property would maintain functional populations of all covered species that depend on old-growth or older forests. Therefore, the effects on old-growth habitat and on the species that depend on this habitat would be minimized to the greatest feasible degree.

Issuance of Incidental Take Permits

Threatened and Endangered Species

Effects on Marbled Murrelets

The primary concern regarding effects on marbled murrelets arises with respect to the amount of

breeding habitat being authorized for harvest. The acquisition of Headwaters Forest and implementation of the HCP would protect over 91 percent of PALCO's existing uncut old growth redwood, which provides the highest quality murrelet habitat. The acquisition and creation of the MMCAs would also protect approximately 50 percent of the acreage of existing likely occupied residual old-growth redwood and old growth Douglas-fir, which provide habitat of lower quality. The short term harvest of lower quality residual stands outside the MMCAs constitutes the most important impact on murrelets. However, stands of uncut and residual old growth left outside of protected areas are generally smaller and more fragmented than those preserved, and contain fewer attributes of quality habitat. The acreage of likely occupied habitat left unprotected by the MMCAs would be less than four percent of the likely occupied habitat in Conservation Zone 4 and less than one percent of the likely occupied habitat in the three-state listed range. The actual proportional impact is probably lower when qualitative aspects are considered. In addition, much of the residual acreage left unprotected by MMCAs will be protected in riparian management zones.

Also, important beneficial aspects of the HCP and the Headwaters Forest acquisition balance the adverse impacts on the marbled murrelet. The Headwaters Forest contains the largest grove of uncut old-growth redwood murrelet habitat remaining outside public ownership in the three-state range of the species. Acquisition would provide for its management for the benefit of murrelets in perpetuity. The MMCA system would aggregate residual and young forest around the four next largest remaining groves, allowing habitat to improve around these groves during the term of the permit, helping to offset the short term adverse effects.

Effects on Northern Spotted Owls

The primary concern regarding effects to northern spotted owls is the level of reduction that could occur in the population on PALCO lands. In anticipation that the owl population will fluctuate with habitat availability, the HCP would allow the population to decline by approximately 30 percent, leaving a minimum level of 108 activity centers, 80 percent of which must be occupied by NSO pairs. The decline in activity centers and owl pairs allowed under the plan must be considered in light of the unusual ecological context provided by the redwood region where PALCO's lands are situated. Over 600 owl sites are known to exist on private timberlands in this region that have been subject to management for many decades. This situation apparently results from the rapid growth of young trees in the area and the abundance of preferred prey species in young forest stands. The pre-project density of northern spotted owls on PALCO's property is one of the highest recorded for the species, and a reduction to the HCP's minimum allowable level would leave the density approximately the same as the nearest U.S. Forest Service demographic study area, where the population appears to be stable. The minimum population level would also be substantially higher than that targeted for the area by the northern spotted owl Recovery Team.

Further, although there will be a decline in owl nesting habitat in the first few decades of the plan, this trend will be reversed in later decades and there will be more nesting habitat on the property at the end of the permit period than exists today. The target reproductive rate would be the same as observed during the last eight years of no-take management. A scientific panel would regularly

evaluate monitoring results and make management recommendations if appropriate, and if the population were to decline to the established minimum, no-take measures would be re-instituted. While the HCP would have adverse effects in terms of displacing a portion of the existing owl population, it would not be expected to have important effects on a larger scale, and would manage and maintain a sufficient population to contribute to the long-term survival of the species.

Effects on Anadromous Salmonids

The primary issues regarding effects to anadromous salmonids (SONCC coho salmon, Southern Oregon California Coastal (SOCC) chinook salmon, Northern California steelhead, and SOCC coastal cutthroat trout) are related to the health of aquatic habitat, including water temperature, lack of instream large woody debris, high sediment loads, degraded watersheds, and cumulative effects. NMFS believes that the interrelated strategies of the Aquatic Conservation Plan will minimize and mitigate the effects on salmonids and their habitat from the covered activities, and will maintain or achieve, over time, properly functioning aquatic habitat conditions.

The riparian management strategy addresses water temperature, recruitment of instream large woody debris, and minimization of sediment input into the water through surface erosion. The hillslope management strategy provides for recruitment of large woody debris, and minimization of sediment input into the water from landslides. The road management strategy minimizes sediment inputs, and reduces cumulative effects. The Disturbance Index addresses degraded watersheds and cumulative effects. Watershed analysis and other forms of adaptive management will also further the goal of the Aquatic Conservation Plan. In the short term the Aquatic Conservation Plan will have a positive effect on sediment reduction. In the mid to long term, the Aquatic Conservation Plan will have a positive effect on water temperatures, recruitment of large woody debris, further minimization of sediment input, improved watershed conditions, and reduced cumulative effects.

Effects on Amphibians and Reptiles

Four species of amphibians (the southern torrent salamander and the yellow-legged, red-legged, and tailed frogs) and one aquatic reptile (the northwestern pond turtle) would be covered by the incidental take permit. All of these species currently persist on the property following many decades of timber management and apparent degradation of aquatic systems, but some are thought to be at population levels much lower than in pristine systems. The primary concern regarding the effects of the HCP on these species is whether the aquatic conservation measures are adequate to provide for their needs in the long term. The elements of the aquatic conservation strategy are designed to begin immediately to reduce sediment delivery to waters on PALCO's property, and over the longer term, provide increasing amounts of down wood and lower stream temperatures as timber stands regenerate in no-cut and partial-cut riparian management zones. In the meantime, refugia will be maintained in the Headwaters Reserve and the MMCAS. Importantly, the watershed analysis process will include a specific element designed to evaluate conditions for the covered amphibians and reptiles, and to assess the potential effectiveness of new prescriptions in providing for these species. Through the combination of high quality refugia, improving conditions on the remainder

of PALCO's property, and active assessment of management needs in riparian prescription setting, the HCP should provide for the long-term survival of these species in the project area.

Water Quality and Quantity

Water quality is measured by many parameters. The primary parameters addressed by the HCP are water temperature and sediment. Seven rivers on PALCO's property have been listed under the Clean Water Act section 303(d), as water quality impaired: Eel River (sediment and temperature), Van Duzen River (sediment), Yager Creek (sediment), Mattole River (sediment and temperature), Mad River (sediment and turbidity), Freshwater Creek (sediment), and Elk River (sediment).

The HCP will have a short term and long term beneficial effect on the 303(d) listed waters and all other waters on PALCO's ownership. The Aquatic Conservation Plan and its interrelated strategies are expected to reduce water temperatures and reduce sediment input over the life of the plan and also have a beneficial effect on other water quality parameters. The riparian management strategy is expected to result in conifer canopy cover that is expected to regulate water temperatures with an acceptable range for salmonids. The riparian management strategy will also reduce sediment inputs into the water through enhanced overland filter capability. The road management strategy will reduce road-related mass wasting, road surface erosion, and stream crossing erosion, thus reducing the amount of sediment currently entering the water from the road network. The hillslope strategy will reduce sediment input from mass wasting events by reducing the potential for timber harvest and road building to trigger landslides.

Effects on Flooding

Implementation of the HCP Aquatic Conservation Plan is expected to reduce sediment influx and increase the potential for large wood recruitment, which will reduce channel aggradation and increase channel capacity, thereby improving channel morphology, over the long term. Improvements to channel morphology may have an effect on reducing the frequency and magnitude of flooding but the potential reduction is not expected to be significant.

Landslides triggered by new management activities are expected to decrease with implementation of the HCP. The rate, extent and timing of landslides triggered by natural events and past management are not expected to be affected by the HCP. Timber harvest will not be conducted on mass wasting areas of concern under the Aquatic Conservation Plan, hillslope management strategy. Construction and reconstruction of roads is also limited under the hillslope strategy. The limitations on management across the landslide prone areas will reduce the potential that a landslide would be triggered by the disturbance created from timber harvesting or road building. The progressive stormproofing program, inspections, and maintenance programs in the road management strategy will also aid in reducing landslide potential by repairing probable road failure areas prior to an event occurring.

Timber Supply, Employment, and Government Revenues

The Services considered whether adoption of Alternative 2 would affect the volume of timber harvested from PALCO's land, its effects on employment, and possible reductions to Humboldt County tax revenues.

The conservation and management measures in the HCP element of Alternative 2 for marbled murrelets and for water quality, aquatic habitat, and salmonids could result in lower amounts of timber available for harvest than harvested in past years. Reduced harvest levels could result in a loss of lumber and related jobs in the wood-products industry. Implementation of Alternative 2 would result in impacts to PALCO and statewide timber harvest levels, lumber and wood product employment in Humboldt County, and county timber yield tax revenues. Annual Humboldt County timber yield tax revenues could experience losses of up to several million dollars but this would be small in comparison to the County's total revenues of several hundred million dollars. Neither the loss of revenue to the County nor lumber and wood products jobs would be significant in relation to total County revenues or employment. The forecast reductions in timber harvest levels could affect the California timber industry and could affect the price of timber in the region.

Several measures contained in Alternative 2 potentially could open to harvest areas of PALCO's land that initially would be unavailable for timber harvest. Watershed analysis is a required element of the HCP's aquatics conservation plan and will be conducted across the ownership within the first five years. Watershed analysis will result in the development of management measures based on site-specific conditions within each watershed. Recommended prescriptions will be developed based on the best available science and data and which are the most compatible with PALCO's operational needs, consistent with the protection of covered species. Site-specific prescriptions established as a result of the watershed analysis process could reduce buffer sizes along all classes of waters. In addition, harvest prohibitions on a 50,000-acre area of PALCO's land that has not yet been characterized for mass wasting could be modified when the area is characterized by a qualified professional geologist. Also, the federal and state wildlife agencies and PALCO will jointly establish a scientific panel to evaluate the definitions of high, very high and extreme mass wasting areas of concern. The panel may modify the definitions and this could result in redelineation of these areas for the entire ownership. Areas currently closed to harvest could become available for timber production.

The Pacific Lumber Company's Record of Violations

The Pacific Lumber Company has violated California Forest Practice Rules and has pleaded guilty to misdemeanor violations in connection with its logging activities, and in late 1998 CDF revoked PALCO's timber operator's license. These are matters of serious concern. The Secretaries carefully considered the Company's record in conducting logging operations and weighed the risks of issuing PALCO a permit against the potential risk of habitat loss in the absence of a permit. In addition, the Secretaries considered what deterrents against permit violations could be included in the HCP/IA in light of the Company's past record.

The Services' regulations provide that they may refuse to issue a permit if they find that the permit applicant evidences a lack of responsibility to hold the permit. 50 C.F.R. § 13.21(b)(1) and (3), § 220.21(b)(3). The assessment of a civil penalty or conviction under a criminal statute or regulation related to the activity for which the permit is sought provides a basis for a finding of lack of responsibility under FWS regulations. 50 C.F.R. § 1321.(b)(1). However, PALCO's history of violations does not automatically disqualify the company from receiving an ITP, and the effect of PALCO's past violations on the decision of whether to issue ITPs is left to the Services' reasoned discretion.

The Services have included several provisions, believed to be without precedent in other HCPs, to provide a significantly increased level of permit compliance oversight and monitoring and effective enforcement and remedies. PALCO is required to fund for the life of the permit an independent third party ("HCP Monitor"), who will have unrestricted access to all PALCO timber harvest activities and will report any deviations from the HCP to the Services and CDFG for appropriate enforcement action. Under the IA, PALCO is explicitly responsible for the actions of all its employees and contractors and must conduct an HCP education program for them. Each contract between PALCO and a third party must contain a provision requiring the contractor to comply with the ITPs.

The IA requires that PALCO provide security in the amount of \$2 million to assure that it will carry out its obligations under the HCP. In the event FWS, NMFS or CDFG draws on the security, PALCO must replenish it to the original amount of \$2 million. A section has been included in the IA providing that the harvesting of a single merchantable tree (8 inches dbh or greater) in violation of the permits constitutes a separate violation for purposes of imposing penalties under state and federal law. These penalties are substantial, including civil and criminal penalties of up to \$25,000 and \$50,000, respectively. Further, under 18 U.S.C. § 3751(5)(b) and (c)(5), respectively, the criminal penalties may be doubled to \$100,000 for each violation by an individual and \$200,000 for each violation by a corporation. Significantly, § 3571(d) allows as an alternative to the above fines, the imposition of a fine equal to twice the gross pecuniary gain to the person guilty of the offense.

Thus, while PALCO's record of violations is a serious concern, on due consideration the Services have determined that it does not warrant denial of the permit application, given the consequences that denial would have for the local economy, PALCO and its employees. Rather, the Services believe the measures included in the HCP and IA and the available remedies will provide an adequate means to ensure compliance with the terms of ITP.

Statutory and Other Factors Considered in this Decision

Tribal Consultation

Another factor the Services considered in making the decision was consistency with the Federal trust responsibility to Native American Tribes. This trust responsibility imposes a duty on Federal agencies to protect trust assets for Tribes. The Secretaries and Services have concluded that the acquisition and transfer of land to public ownership and issuance of the proposed permits is

consistent with this trust responsibility. Communication with interested Native American Tribes and representative entities has been a component of the development of this proposed action. The Services have coordinated with the 14 federally recognized Indian Tribes in the Humboldt area lands concerning developments in the Headwaters Forest Project and the Services will continue to consult with interested Tribes regarding HCP implementation. The Services believe that the Tribes may be able to provide the Services with valuable site specific knowledge and technical expertise.

Effects on Tribal Resources of Concern

One of the factors the Services considered in making their decision on PALCO's application was consistency with the Federal trust responsibility to Native American Tribes. The trust responsibility imposes a duty on Federal agencies to protect trust resources of Tribes (depending upon the circumstances this may include, for example, Tribal lands, water rights, or hunting, fishing and gathering rights guaranteed by Treaty). No tribal trust resources have been identified, through either contact with the individual tribes, scoping or public comment. The Services therefore conclude that no tribal trust resources will be adversely affected by issuance of the ITP and implementation of the HCP. The Services are aware of general tribal concerns regarding large planning efforts, such as this HCP, therefore will maintain contact with the tribes during implementation of the HCP.

The Public Interest in Proceeding with the Transaction

P.L. 105-83 authorizes but does not mandate the expenditure of public funds for the acquisition of the Headwaters Forest on the terms set forth in the legislation. The decision to proceed with the transaction is left to the discretion of the Secretary of the Interior.

The consideration PALCO is receiving for the Headwaters Forest has been carefully considered in light of the September 1996 Agreement, the provisions of P.L. 105-83, and the appraisals of the properties to be acquired. As noted above, the Secretary concluded in his opinion of value that the expenditures to acquire the properties are well within the range identified in the appraisals. Additionally, the identity and past actions of the corporate owner of the Headwaters Forest do not lessen the value of the property or make acquisition through purchase any less necessary to assure its preservation.

Apart from financial considerations, acquisition of the Headwaters Forest assures that the unique and irreplaceable old growth redwood trees will be preserved in public ownership in perpetuity for the benefit of future generations. Even if it were to be assumed that harvest of these trees would presently be severely constrained by provisions of current law, there is no assurance that present conditions or the law would not change in the future in a way that would put much of the old growth redwood at substantial risk.

A strong, well justified, and broad-based desire to bring the Headwaters Forest into public ownership has existed for many years. Until this time, that goal has not been achieved. Completion of the actions proposed in this ROD will, consistent with the intent of Congress, provide a significant and

everlasting benefit to the American people and is found to be overwhelmingly in the public interest.

X. CONDITIONS

The actions and decisions which are the subject of this ROD are integrally related and are all components of the Headwaters transaction authorized by PL 105-83. The decision to proceed with each of the actions is expressly contingent upon the decisions to proceed with each of the other actions. Additionally, this ROD shall be effective only upon provision by the State of California of \$130 million, and approval by the State of PALCO's SYP. Appropriate provisions reflecting the integrated nature of the several actions constituting the transaction, including actions of the State of California, have been included in escrow instructions as conditions which must be met to allow the transaction to be completed.

IX. SIGNATURES

By signing this Record of Decision together, we exercise our respective authorities over only those portions relevant to our authority.



Bruce Babbitt, Secretary
U.S. Department of Interior

February 25, 1999



Terry D. Garcia, Assistant Secretary
U.S. Department of Commerce

February 25, 1999